1. A process for formation of a photoresist-free and antireflective coating (ARC)-free peripheral upper surface portion of a semiconductor substrate adjacent the end edge of said substrate by the steps of:

a) forming an ARC layer on one surface of a semiconductor substrate;

b) chemically treating said ARC layer to chemically terminate said ARC layer a first distance from the end edge of said substrate;

c) forming a photoresist layer over said semiconductor substrate and over said ARC layer thereon; and

d) exposing the peripheral portion of said photoresist layer to radiation followed by development of said exposed peripheral portion of said photoresist layer to photolithographically terminate said photoresist layer a second distance from said end edge of said substrate wherein said second distance is smaller than said first distance.

2. The process of claim 1 wherein said first distance is at least 1.5 mm from said end edge of said substrate.

3. The process of claim 1 wherein said first distance is less than 3 mm from said end edge of said substrate.

4. The process of claim 1 wherein said second distance is at least 1 mm from said end edge of said substrate.

5. The process of claim 1 wherein said second distance is no greater than at least 0.5 mm less than said first distance.

6. The process of claim 1 wherein said first distance ranges from at least 1.5 mm to less than 3 mm.

7. The process of claim 1 wherein said second distance ranges from at least 1 mm to no greater than 0.5 mm less than said first distance.

8. A process for formation of a photoresist-free and antireflective coating (ARC)-free peripheral upper surface portion of a semiconductor substrate adjacent the end edge of said substrate by the steps of:

a) forming an ARC layer on one surface of a semiconductor substrate;

b) chemically treating said ARC layer with a solvent for said ARC layer to chemically terminate said ARC layer a first distance of at least 1.5 mm from the end edge of said substrate;

c) forming a photoresist layer over said semiconductor substrate and over said ARC layer thereon; and

d) exposing the peripheral portion of said photoresist layer to radiation followed by development of said exposed peripheral portion of said photoresist layer to photolithographically terminate said photoresist layer a second distance of at least 1 mm from said end edge of said substrate wherein said second distance is smaller than said first distance.

9. The process of claim 8 wherein said end edge of said substrate defines any point at the circular edge of said substrate at which a line at a tangent with said circular edge of said substrate is perpendicular to a line lying in the plane of said substrate.

10. The process of claim 8 wherein said first distance is less than 3 mm from said end edge of said substrate.

11. The process of claim 8 wherein said second distance is no greater than at least 0.5 mm less than said first distance.

12. A process for formation of a photoresist-free and antireflective coating (ARC)-free peripheral upper surface portion of a semiconductor substrate adjacent the end edge of said substrate by the steps of:

a) forming an ARC layer on one surface of a semiconductor substrate;

b) chemically treating said ARC layer with a solvent for said ARC layer to chemically terminate said ARC layer a first distance of at least 1.5 mm but less than 3 mm from the end edge of said substrate;

c) forming a photoresist layer over said semiconductor substrate and over said ARC layer thereon; and

d) exposing the peripheral portion of said photoresist layer to radiation followed by development of said exposed peripheral portion of said photoresist layer to photolithographically terminate said photoresist layer a second distance of at least 1 mm, but no greater than at least 0.5 mm less than said first distance, from said end edge of said substrate wherein said second distance is smaller than said first distance.

13. The process of claim 12 wherein said end edge of said substrate defines any point at the circular edge of said substrate at which a line at a tangent with said circular edge of said substrate is perpendicular to a line lying in the plane of said substrate.